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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,831	10/08/2003	Matt Kriesel	C228 1020.4	6602
7590	05/31/2006		EXAMINER	
Matt Kriesel Impact Gel Corporation 204 North Washington Street Melrose, WI 54642				VO, HAI
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/681,831	KRIESEL, MATT	
	Examiner Hai Vo	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 March 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3,7-11,13-16,19-21 and 23 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3,7-11,13-16,19-21 and 23 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 October 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

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1. The drawings filed on 10/08/2003 are acceptable in view of the amendment to specification filed on 03/27/2006.
2. The claim objections and 112 claim rejections are considered moot in view of the claim cancellation.
3. The 102 art rejections over Acker (US 5,066,259) have been withdrawn in view of the present amendment because Acker does not teach a doll structure wherein the substrate comprises a foamed polymeric material having a density less than the polymeric gel. However, the 103 rejections based on Acker in view of other cited references are maintained.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1-3, 7, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acker (US 5,066,259) in view of Hills (US 4,170,086). Acker discloses a doll structure comprising an envelope comprising a polymer gel substantially surrounding a fiber mat and a skin comprising a top layer and bottom layer as shown in figure 5. The skin is made from a resilient polymeric material (column 4, lines 50-52). The fiber mat has a density less than the polymer gel (claim 1, column 5, lines 17-20). Acker does not disclose a shock-absorbing envelope. However, the doll structure

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meets all the structural limitations as required by the claims. The envelope comprises a polymer gel surrounding a substrate, a top layer and bottom layer formed from a resilient polymeric material. The substrate has a density less than that of the polymer gel. Therefore, it is not seen that the doll structure would have performed differently than the reinforced polymeric pad of the present invention in terms of shock absorption. Acker does not specifically disclose the doll structure wherein the core 53 is made from a foamed polymeric material. Hills, however, teaches a stuffed animated toy wherein the stuffing material can be made from PVC foam, mat of natural or synthetic fibers (column 6, lines 30-40). Therefore, Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute PVC foam for the synthetic fibers because PVC foam and synthetic fibers have been shown in the art to be recognized equivalent stuffing materials to provide bulk and form to the doll structure.

6. Claims 8, 11, 13-15, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acker (US 5,066,259) in view of Hills (US 4,170,086) as applied to claims 1 and 16 above, and further in view of Yates (US 6,027,674). Acker does not specifically disclose the doll structure wherein the polymer gel made from an epoxidized vegetable, a thermoplastic polymer and prepolymer. Yates, however, teaches a cushion material finding application in numerous toys comprising a gel/foam combination made from an epoxidized mineral oil and a blend of SEBS gel with other homopolymer which reads on Applicant's prepolymer. Yates discloses that varying the amount of the plasticized oil to impart the resilient properties of the

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cushion material is known in the art (column 2, lines 60-65). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the gel composition as taught by Yates motivated by the desire to provide the toys with excellent resiliency.

Yates does not specifically disclose an epoxidized vegetable oil. The examiner takes Official Notice that it is common and well known in the art to substitute the vegetable oil for the mineral oil because the two materials have been shown in the art to be recognized equivalent plasticizer oil for the gel composition.

Yates does not specifically disclose the amounts of thermoplastic polymer and prepolymer and plasticizer oil. Since the concentration is recognized as a result-effective variable, differences in concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical or provides unexpected results. Therefore, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the individual component of the gel composition having an amount in the range instantly claimed motivated by the desire to impart the resilient property of the material. This is in line with In re Aller, 105 USPQ 233 which holds discovering the optimum or workable ranges involves only routine skill in the art.

7. Claims 9, 10, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acker (US 5,066,259) in view of Hills (US 4,170,086) and Yates (US 6,555,214), as applied to claims 8 and 16 above, further in view of Burgdorfer et al

(US 4,456,642). Yates does not specifically disclose the use of the tin compound as a catalyst. Burgdorfer, however, teaches a gel pad for use in wheelchair cushions wherein the gel composition comprises a tin compound as a catalyst (column 9, lines 10-15). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ tin compound as the catalyst of the gel composition motivated by the desire to promote the formation of the gel material.

Response to Arguments

8. The art rejections based on Acker and Hill have been maintained for the following reasons. Applicant argues that Acker is improperly combinable with Hill to achieve the claimed invention because the cited references are not in the same field as Applicant's endeavor and thus are not analogous to claimed invention. Applicant states that since the cited references are related to Doll manufacture whose concerns are creating a lifelike doll and the present invention provides a solution to the problem of injuries caused by impacts, the cited references are not reasonably pertinent to the particular problem with which the Applicant was concerned. Applicant then concludes that the combined teachings of Acker and Hill do not establish the *prima facie* case of obviousness. The examiner respectfully disagrees because the arguments appear to be flawed and inaccurate. In accordance with MPEP 2141.10 (a), a primary reference is in the same field as Applicant's endeavor and a secondary reference is non-analogous to the Applicant's invention, the secondary reference must be reasonably pertinent to the particular problem with which the applicant was concerned in order to rely on a reference as a basis for

rejection of an applicant's invention. Based on this, Applicant's arguments are not found persuasive because **both** Asker and Hill references which were relied on as a basis for rejection of an applicant's invention are non-analogous to claimed invention and therefore, there are no need for Hill to be reasonably pertinent to the particular problem with which the applicant was concerned as required by MPEP 2141.10 (a). The non-analogy between the prior art references and the claimed invention are completely irrelevant to the issues of obviousness. It is believed that there is a motivation to combine the teachings of Asker and Hill to achieve the claimed invention, and the combined teachings of the cited references provide a reasonable expectation of success. Therefore, it is the examiner's position that the cited art can be used in a 35 U.S.C 103(a) rejection.

Applicant further argues that one skilled in the art would not have been motivated to substitute the light weight foamed PVC of Hill for the fiber mat of Acker for the stuffing material because foam is a light weight material and Acker is directed to creating a doll that posses a weight factor approximately equivalent to the weight factor of a human child. The arguments are incomplete and misplaced in view of the reference disclosure. Acker makes clear that the doll structure constructed in part or in whole from an elasto-polymer material which provides the weight characteristic desired to simulate the weight of a human child (column 2, lines 45-50). Acker uses the synthetic fibers as the stuffing material to provide bulk and form to the doll structure. In view of the teachings of Hill, one skilled in the art would be motivated to substitute the light weight foamed PVC of Hill for the fiber mat of Acker because

PVC foam and fiber mat are equivalent stuffing materials for the stuffed toy animals to provide bulk and form to the doll structure. The substitution has nothing to do with elimination of an elasto-polymer material which is a required component of the Acker doll structure. The elasto-polymer material has a density and compressibility necessary to simulate the weight of human tissue. Applicant contends that the combined teachings of Acker and Hill do not disclose or suggest the formation of shock-attenuating elastomeric pad. The examiner respectfully disagrees. It appears that the doll structure of Acker as modified Hill meets all the structural limitations as set forth in the claims. The resulting doll structure comprises an envelope that includes a polymer gel surrounding a foamed PVC wherein the foamed PVC has a density less than the polymeric gel. Therefore, it is not seen that the doll structure would not be capable of absorbing shock as the reinforced polymeric pad of the present invention as like material has like property. Applicant points out that as a stuffing material, the foamed PVC increases the bulk and overall weight to the animated toys while Applicant adds a foamed PVC to reduce weight to the reinforced polymeric pad. Applicant then asserts that the prior art actually teaches away from that which is claimed in the present invention in that it teaches the adding of weight. The arguments are not found persuasive for patentability because the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227

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USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). The combination of the cited references suggested in the Office Action is proper and thus sustained.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hai Vo

HV

**HAI VO
PRIMARY EXAMINER**